	Middle Years Programme	Form F3.1
	Moderation coversheet: Subjects	

Please complete a copy of this form for **each** folder of work submitted for moderation.

Please ensure that the material being submitted for moderation conforms to the requirements set out in the relevant subject group guide. All the criteria **must be applied twice** within the folder accompanying this form, unless stated otherwise in the subject guide.

School name: VICTORIAL SHANGHAI ACADEMY School code: 2634

Student's name/number: Josephine Tam Subject: MATHS (STANDARD)

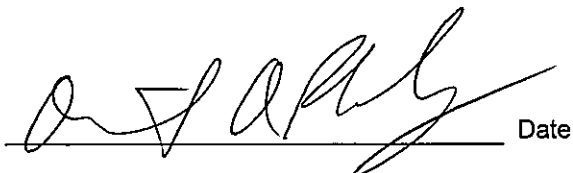
The student's work is (please mark box):

☐ comparatively good ☑ average ☐ comparatively weak

Nature and title of assessment task		Criteria					
		A	B	C	D	E	F
1. Test	Teacher	4		3			
	Moderator						
2. The Bench	Teacher	3		4	3		
	Moderator						
3. The Company Report	Teacher		2		3		
	Moderator						
4. A Trig Identity	Teacher		2				
	Moderator						
5.	Teacher						
	Moderator						
6.	Teacher						
	Moderator						

Please use the reverse of this form or separate sheets to identify the conditions under which each piece of work was done (project, classroom test, end-of-term examination, and so on), the amount of support provided, any special circumstances, and general/specific information on the student. Provide any information that may assist the moderators in determining how the criteria were applied.

Name of teacher: Daniel Slosberg

Signature of teacher:  Date: March 22, 2013

Names of teachers involved in internal standardization for this subject:

Bonnie Luk (MYP 4 & 5), Daniel Slosberg (MYP 5), Yush Yuen (MYP 4)

Teacher's Comments:

Task	Criterion	General remarks
Test	Question Analysis	**Simple** Questions 1a & 1b - moves incorrectly from binomial form to factored form 1c - correctly moved from trinomial form to factored form, appropriate deductions made 2a - correctly moves from a list of data to fraction form for mean, appropriate deductions made 2b - moves incorrectly from a list of data to fraction form for median, after initial error, appropriate deductions are made 2c - correctly moves from list form to list of modes **More Complex** Questions 3a - correctly moves from a story problem to a probability (fraction) 3b - correctly moves from a story problem to a sum and then to a fraction, appropriate deductions are made 4a - trouble manipulating equations, some appropriate deductions are made as well as some inappropriate ones 4b - trouble moving from a previously given equation to a new situation, having missed the crucial initial step, further deductions are correct, but not innovative **Challenging** Questions 5a - use of statement (reason) proof form, some appropriate deductions, but more inappropriate deductions are made 5b - first instance of unclear reasoning 6a - correctly moves from diagram to equations for hemisphere but not for cylinder, deductions in cylinder are strange, but deductions elsewhere are correct, small problem of order of pi and cm on answer line 6b - correctly moves from diagram to cylinder and hemisphere, makes appropriate deductions throughout, reasoning is unclear however **Unfamiliar** Questions 7a - misses Pythagorean theorem 7b - correctly finds 3 equations from the diagram 7c - correctly uses Pythagorean theorem 7d - incorrect deductions in the unfamiliar part of the question 8a - makes appropriate deductions moving from coordinates to equations including square roots 8b - correctly finds the slope, does not move to the equation of a line, does not appear to have run out of time as an answer is on the answer line 8c - not attempted 8d - not attempted
	A - 4	Josephine made appropriate deductions in simple questions 1c, 2a, 2c, 7b, 7c, and to some extent in 2b. Josephine also made appropriate deductions in more complex questions 3a, 3b, 8a, and to some extent in 4a and 4b. Generally correct deductions are made in challenging questions 6a and 6b with some errors, but not in 5b and not completely in 5a. It was felt that while she generally made appropriate deductions on more complex problems, she struggled on the challenging parts of the higher level questions, and therefore earned a level 4.
	C - 3	Josephine's lines of reasoning are clear in questions 1-4 even when her deductions are incorrect. She shows use of factored form, fractions, equations, and moves from lists and diagrams with some success. Instances of unclear reasoning in 5b and 6b, however, resulted in a final score of 3.

Task	Criterion	General remarks
The Bench	A - 3	Josephine uses three quadratic functions with vertical stretches, a reflection, and a small vertical shift including one compound transformation. Under the task specific rubric, this appears to fulfill a level 5 as Josephine notes in her self assessment on page 9. In reading her description (the single paragraph under her final draft on page 8, she notes the general equation without specifying what a, b, and c do; talks about "stretch[ing] the curve upside down" instead of "reflecting" it; and talks about moving it "left or right" instead of down. She does mention "stretch[ing] it vertically" correctly, but without the stretch factor. We felt this reduced her treatment from challenging to more complex as only two transformations were described and one was described clearly but without the correct terminology and the other was described incompletely.
	C - 4	Josephine's **initial sketch** is on page 7. It is clearly labeled with a title and includes proper units. It does not have a caption. Her **measurements** are in a table below the sketch using labels from the sketch and are also on the sketch. They have the correct units. A title is present although it appears below the table. The **initial function research** is on pages 4-6. Josephine uses sufficient mathematical language, but not always quite correctly, when describing the three transformations. She moves between words and pictures with some success. Her scale on screen shot 6 is also unfortunate. It is clear what she is describing, but certainly not concise, logical or complete. Her **bibliography** includes two sites on benches, one site on functions, and Geogebra, although it is not in the proper format. Throughout her essay, it is clear what she is trying to describe, although as a second language learner she sometimes has difficulty expressing her thoughts in proper English--saying, for example "It because when the number of ^2 get much, the curve line will be thinner." instead of "As the coefficient of the x^2 term increases, the seat of the chair would become too small." on page 9. It's clear what she means, but the mathematical language while sufficient to get her point across, is not good.
	D - 3	Josephine begins her reflection on page 9 discussing her self assessment of the final draft of her bench. The second to last paragraph on page 9, she admits **correctly but briefly** that her bench would not work in real life. She doesn't **describe the importance** of her findings in much detail. On page 10, figure 10, she **attempts** to calculate her degree of accuracy using percentage error, but does so incorrectly. She is in the level 3-4 box but hasn't quite filled it, hence the level 3.
The Company Report	B - 2	On page 15 of the .pdf file, Josephine displays her data for ING's book value. She applies the mathematical problem-solving technique of graphing to look for a pattern. In figure 3 on page 16 she plots book value and percentage increase thereof, but these percentage increases are calculated incorrectly (she has simply divided book value by 10. By calculating percentage increase, she shows that she believes the pattern to be an exponential increase.
	D - 3	Josephine describes the importance of her findings in connection to real life saying they "had a lot of profit in the last few years, and they are very responsible to the people that bought their company's stock." She does not attempt to justify her degree of accuracy, however, and therefore cannot earn a level 4.

A Trig Identity	**B - 2**	It is clear Josephine believes she has found a general rule, but it is unclear what that rule is. In question 3, what is stated as a general rule was just the chart memorized in class. In question 4, she tests her rule with two larger angles she came up with and gets answers consistent with the very simple but untrue pattern of sin(2x) being +/-√3/2 and cos(2x) being +/-1/2. Because it was unclear what her general rule was, and the only pattern she seemed to have found was very simple, she was awarded a level 2. She applied, with some guidance, a mathematical problem solving technique to find trigonometric values and may have found, but did not state clearly, a simple pattern.